PHYSICS

No A-Bomb Surge for N. Y.

➤ THE DREADED "base surge" which spread out from the Bikini underwater A-bomb explosion will not occur in temperate climates.

Speculations that a base surge could inundate New York City and leave in its wake very appreciable radioactive contamination are "unfounded from a meteorological standpoint," Air Force Col. B. G. Holzman reports in the BULLETIN OF THE AMERICAN METEOROLOGICAL SOCIETY (Sept.).

"To an observer ten miles away," Col. Holzman says, "the 'base surge' was indeed a frightening and almost cataclysmic spectacle. The 'surge,' instead of diminishing with time and travel-distance, increased in horizontal extent to many thousands of feet and reached a height of several thousand feet."

But a duplication of this base surge in New York harbor might be difficult if not impossible to accomplish.

Col. Holzman explains that the base surge was dependent on the very moist tropical air mass prevailing at the time of the explosion. The surge acted as a meteorological "cold front," pushing the moisture-laden surrounding air up. This moisture then condensed, adding to the height and volume of the "surge."

The important point is, Col. Holzman believes, that the moisture in the surge in its later stages did not rise from the lagoon but was already in the air at the time of the explosion and, therefore, had little radioactive contamination.

The severest radioactive contamination, he goes on, is associated with the initially-ejected water in the familiar cylindrical column, around which the surge forms, and the plume. The contaminated rain from this source is of "greatest significance in the problem of civilian defense."

Science News Letter, October 20, 1951

GENERAL SCIENCE

Draft Boards Cooperate

➤ THE COLLEGE draft deferment program is working "beautifully," according to Dr. M. T. Trytten, the man most responsible for the program. Dr. Trytten headed the Selective Service committee which drafted the plan.

The expected opposition of local draft boards to the system whereby college students who achieve a passing mark on an aptitude test or are in the upper portions of their classes are deferred has not developed, he told SCIENCE SERVICE.

In the entire state of Ohio, as an example, only two draft boards have refused to follow the rules as laid down by Presidential order—and then only in the cases of three students. These were appealed and the students are now in college.

About 213,000 students achieved marks of 70 or higher in the tests given last spring and summer. Others were eligible for deferment because of their class standings.

Dr. Trytten explained the success of the method by saying that it gives local boards yardsticks by which they can determine eligibility for deferment with impartiality.

"Local board members," he pointed out, "can now sleep nights without worrying about whether they made correct decisions in individual cases."

Reports from Minnesota and upstate New York are similar to those from Ohio, Dr. Trytten stated. There has been a little difficulty in Kansas, but that was minor.

If a student is refused deferment, he can appeal to state boards and national Selective Service headquarters. In the few cases where appeals have been necessary, he said, students with the proper qualifications for deferment under the program have been deferred.

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Question Box

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GENERAL SCIENCE

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